

SR 801 (LOOP 303 TO LOOP 202)
SUBSECTION COMPARISON

5/9/2007 8:50

SECTION SUBSECTION	SECTION 1		SECTION 2								SECTION 3	
	1a	1b	2a-1	2a-2	2b-1	2b-2	2c-1	2c-2	2c-3	3a	3b	
COST AND RIGHT OF WAY												
Relative Construction Cost	Base +\$3M+ (Not estimated due to UPRR bridge feasibility challenges, but would be extremely expensive)	Base	Base + \$6M Base + \$11M	Base Base + \$4M	Base + \$16M Base + \$11M	Base + \$110M Base	Base + \$109M Base + \$63M	Base + \$194M Base + \$77M	Base + \$52M Base + \$35M	Base + \$15M +/- Base + \$100M +/-	Base	
Relative Right of Way Cost	200	194	647	692	948	810	761	729	767	327	372	
Net Right of Way Acquire	1	1	22	22	14	14	208	208	208	85	67	
Residential Displacements (Existing)	0	0	360	366	181	181	16	16	16	323	0	
Residential Displacements (Planned)	0	0	1	1	0	0	0	0	0	0	3	
Business Displacements	No	No	Yes	Yes	Possible	Possible	No	No	No	No	Yes	
Daily Displacements	No	No	Yes	Yes	Possible	Possible	No	No	No	No	Yes	
Planned School Impacts	No	No	Yes	Yes	Possible	Possible	No	No	No	No	Yes	
Past, Current & Planned Sand & Gravel Operation Impacts	No	No	No	No	Yes	Yes	Yes	Yes	Yes	No	Yes	
COMMUNITY SUPPORT												
Goodwill Community Support	No	Yes	Neutral	Neutral	Neutral	Neutral	Supports Avoidance	Supports Avoidance	Supports Avoidance	Neutral	Neutral	
Avoidable Community Support	Neutral	Neutral	No	No	No	No	Yes	Yes	Yes	Neutral	Neutral	
Phoenix Community Support							Slightly favored due to shielding of WWTP. Also, may support avoidance.	Slightly favored due to shielding of WWTP. Also, may support avoidance.	Yes - Favored due to shielding of WWTP. City Council expected to voice support formally soon.		Yes - City Council expected to voice support formally soon.	
Mariopa County	Neutral	Neutral	Neutral	Neutral	Neutral	Neutral	Yes	Yes	Yes	No	Unknown	
ENGINEERING												
Geometric Design	Undesirable due to UPRR Crossing	Desirable	Desirable	Desirable	Acceptable	Acceptable	Acceptable	Acceptable	Acceptable	Undesirable due to Broadway Crossing and complications with future ARS connection.	Desirable, however, more of the SR 301 / SR 202L TI is over the Salt River	
Drainage Implications	Substantial. Problematic to drain stormwater from north of UPRR to the Gila River due to numerous utilities.	Moderate. Must drain stormwater with a pump station at Sarval to cross the Buckeye Canal to the Gila River.	Minor. Shortest River Xing. Must cross DRCC - Possible FCIMC cost share opportunities.	Minor. Shortest River Xing. Must cross DRCC - Possible FCIMC cost share opportunities.	Moderate. Must cross through DRCC basin and over DRCC canals. Possible FCIMC cost share opportunities.	Moderate. Must cross through DRCC basin and over DRCC canals. Possible FCIMC cost share opportunities.	Substantial. Must cross through DRCC basin and will be located immediately upstream of Tres Rios levee, impacting Tres Rios basins. Possible FCIMC cost share opportunities.	Substantial. Must cross through DRCC basin and will be located immediately upstream of Tres Rios levee, impacting Tres Rios basins. Possible FCIMC cost share opportunities.	Substantial. Will be located immediately upstream of Tres Rios levee, impacting Tres Rios basins. Possible FCIMC cost share opportunities.	Undesirable. Drainage outlet must cross Broadway - a major SS corridor.	Nothing unusual or unique.	
Traffic Operations	When looking to the west the alignment would cause out-of-direction travel. Safety concerns with a Sarval TI and proximity to UPRR crossing. SR 301L / SR 301 TI must use at least 1-lane ramps for NW, ES, SW & EN and 2-Lane ramps for NE, WS, SE and WN for LOS D or better. Substantial. UPRR ROW contains numerous fiber optic lines and a petroleum pipeline. Some relocations may be required.	Consistent with SR 301 alignment direction to the west crossing. SR 301L / SR 301 TI must use at least 1-lane ramps for NW, ES, SW & EN and 2-Lane ramps for NE, WS, SE and WN for LOS D or better. Minor pipeline encroachment.	LOS D or better for 2030. Higher demand than the 2c options. More efficient and balanced TI traffic utilization compared to 2c.	LOS D or better for 2030. Higher demand than the 2c options. More efficient and balanced TI traffic utilization compared to 2c.	LOS D or better for 2030. Higher demand than the 2c options. More efficient and balanced TI traffic utilization compared to 2c.	LOS D or better for 2030. Higher demand than the 2c options. More efficient and balanced TI traffic utilization compared to 2c.	LOS D or better for 2030. Lower demand than the 2a2b options. Less efficient and balanced TI traffic utilization compared to 2a2b options.	LOS D or better for 2030. Lower demand than the 2a2b options. Less efficient and balanced TI traffic utilization compared to 2a2b options.	LOS D or better for 2030. Lower demand than the 2a2b options. Less efficient and balanced TI traffic utilization compared to 2a2b options.	Less demand than 3b. SR 202L / SR 301 TI must use at least 2-lane ramps for SW & ES & EN and 3-lane ramp for NW for LOS D or better.	Greater demand than 2a. SR 202L / SR 301 TI must use at least 2-lane ramps for SW, ES & EN and 3-lane ramp for NW for LOS D or better.	
Major Utility Impacts	Moderate due to UPRR / MC 95 bridge and drainage solution north of UPRR. Possibly two pump stations needed.	Minor. Shortest Length and only 1 pumpstation needed.	Moderate 500 kV & 230 kV OHP relocations. Minor pipeline encroachments.	Moderate 500 kV & 230 kV OHP relocations. Minor pipeline encroachments.	Substantial 500 kV & 230 kV OHP relocations. Substantial pipeline encroachments.	Moderate 500 kV & 230 kV OHP relocations. Moderate pipeline encroachments.	Substantial 500 kV & 230 kV OHP relocations. Substantial pipeline encroachments.	Moderate irrigation impacts. Moderate pipeline encroachments.	Minor irrigation impacts. Moderate pipeline encroachments.	Moderate. SS crossings in Broadway Road and minor 50 kV OHP relocations.	Minor 60 kV OHP relocations only.	
Maintenance Issues			Nothing unusual or unique. Shortest Length.	Nothing unusual or unique. Shortest Length.	Nothing unusual or unique. Second shortest length.	Nothing unusual or unique. Second shortest length.	Moderate. Length is 0.4 miles longer.	Moderate. Length is 0.5 miles longer.	Moderate. Length is 0.6 miles longer.	Possibly Undesirable: Storm drain siphon's may be needed at Broadway.	Nothing unusual or unique.	
ENVIRONMENTAL												
Prime & Unique Farmlands (Acres)	112.7	141.1	714.2	657.9	727	639.1	663.1	569.2	665	238.8	397.7	
Biology Impacts - Critical Habitat Vegetation	None	None	None	None	Possible Wetland impacts at Avoidade WWTP outfall	Possible Wetland impacts at Avoidade WWTP outfall	Possible Wetland impacts at Avoidade WWTP outfall	Possible Wetland impacts at Avoidade WWTP outfall	None	None	None	
Biology Impacts - Wildlife (Threatened, Endangered & Species of Concern)	Elevated Noise levels, air quality adjacent to Gila River Habitat	Elevated Noise levels, air quality adjacent to Gila River Habitat	Elevated Noise levels, air quality adjacent to Agua Fria River Habitat	Elevated Noise levels, air quality adjacent to Agua Fria River Habitat	Elevated Noise levels, air quality adjacent to Agua Fria River Habitat	Elevated Noise levels, air quality adjacent to Agua Fria River Habitat	Elevated Noise levels, air quality adjacent to Agua Fria, Salt and Gila River Habitats	Elevated Noise levels, air quality adjacent to Agua Fria, Salt and Gila River Habitats	Elevated Noise levels, air quality adjacent to Agua Fria, Salt and Gila River Habitats	None anticipated	Elevated Noise levels, air quality adjacent to Salt River Habitat	
Floodplain Impacts (Acres)	0	3.6	17.4	17.4	27.6	24.2	25.9	23.9	246.6	16.4	21.1	
Justification/Water Impact (Acres)	0	1.9	3.4	3.4	6.8	6.8	6.7	5.9	3.7	16.6	2.2	
Water Resource Impacts	24 Wells, Agua Fria River (0.7 A.c.), Bullard Wash & Buckeye Feeder	24 Wells, Agua Fria River (0.7 A.c.), Bullard Wash & Buckeye Feeder	24 Wells, Agua Fria River (0.7 A.c.), Bullard Wash & Buckeye Feeder	24 Wells, Agua Fria River (0.7 A.c.), Bullard Wash & Buckeye Feeder	28 Wells, Agua Fria River (1.1 A.c.), Bullard Wash, Wetlands & Buckeye Feeder	28 Wells, Agua Fria River (1.0 A.c.), Bullard Wash, Wetlands & Buckeye Feeder	82 Wells, Agua Fria River (1.0 A.c.), Bullard Wash, Wetlands, Buckeye Feeder & St. Johns Canal	82 Wells, Agua Fria River (1.0 A.c.), Bullard Wash, Wetlands, Buckeye Feeder & St. Johns Canal	82 Wells, Agua Fria River (1.1 A.c.), Bullard Wash, Wetlands, Buckeye Feeder & St. Johns Canal	32 Wells & Salt River (2.9 A.c.)	16 Wells & Salt River (2.19 A.c.)	
Relative Noise Impacts (Exist Conditions)	2 wells	No	No	No	Moderate	Moderate	High	High	High	High	Moderate	
Air Quality	Conformance	Conformance	Conformance	Conformance	Conformance	Conformance	Conformance	Conformance	Conformance	Conformance	Conformance	
Visual (Quality Rating, Higher = Better)	3 - Due to proximity to River & Mountains	3 - Due to proximity to River & Mountains	3	3	3	3	3	3	3	3	3	
Possible Hazardous Material Impacts	4 low level sites	1 low level site	2 low level sites	2 low level sites	0	0	0	0	0	1 high level site	1 low level site	
Section 4(f) Element Impacts	UPRR & 2 Trails - Will be spanned	Buckeye Canal - Will be spanned	3 Trails - Will be spanned	3 Trails - Will be spanned	3 Trails - Will be spanned	3 Trails - Will be spanned	3 Trails - Will be spanned	3 Trails - Will be spanned	3 Trails - Will be spanned	SRP Lateral 10, 1 Trail, 1 Trail (will be spanned)	1 Trail (will be spanned)	
Environmental Justice - Probability of Impacts (Disabled, Age 65 & Older, Minority, Poverty, & Female HOH). Response based on number of individual displacements noted above. Planned development impacts (Acres)	Low	Low	Low	Low	Low	Low	High	High	Moderate	Very High	Moderate	
Cultural Resource (Historic) Site Impacts	UPRR - Will be spanned	Buckeye Canal - Will be spanned	Site AZ T-11:42 (ASM)	Site AZ T-11:42 (ASM)	Site AZ T-11:42 (ASM)	Site AZ T-11:42 (ASM)	St Johns Canal, Everett Dairy, Southern Ave. Dairy	St Johns Canal, Southern Ave. Dairy	St Johns Canal	Lateral 19.0	None	
Cultural Resource (Prehistoric) Impacts (Acres)	3.17	27.56	146.39	122.33	111.23	10.94	61.17	130.2	12.05	11.47	32.98	
GENERAL STATISTICS												
Length (mi.)	1.81	1.78	8.06	8.07	8.21	8.16	8.47	8.47	8.72	3.26	3.14	
Number of Service Ties	10	9	7	7	7	7	3	3	6	3	3.5	
Storm Requirements (CV)	1.04	0.94	2.34	2.04	2.24	3.04	3.04	3.04	3.04	1.14	0.94	
Bridge Deck Area (SF)	283,000	83,964	734,627	734,300	1,461,090	1,206,687	1,569,338	1,523,002	1,021,708	247,000	175,069	
Number of Pump Stations	1 and possibly 2	1	0	0	0	0	0	0	0	0	0	